DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Department of Toxic Substances Control

The mission of the Department of Toxic Substances Control (DTSC) is to restore, protect, and enhance the environment to ensure public health and environmental quality and economic vitality by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

Overview

DTSC implements its strategic plan through its three operational programs: site mitigation and brownfields reuse; hazardous waste management; and science, pollution prevention and technology. Other divisions—legal counsel office, legislation, external affairs, and administrative services—support the core program elements of DTSC. The DTSC strategic plan has six strategic goals and 26 strategic objectives that guide the program areas in the assignment and completion of work. The department's accomplishments and priorities also reflect progress toward meeting Cal/EPA's strategic goals, as indicated at the beginning of each topical section.

A note about the organization of this report: DTSC has many accomplishments and priorities to report on its core work, reflected in the sections related to the organizational program areas. This report begins with the accomplishments and priorities in six areas that the DTSC executive management team identifies as deserving of special attention and emphasis: schools, brownfields reuse, recycling military facilities, enforcement, pollution prevention, and public participation and environmental justice.

DTSC Strategic Goals

- 1. Protect public health and the environment from adverse effects of contaminated sites.
- 2. Minimize and/or eliminate adverse environmental and public health effects resulting from the past, present, and future generation and management of hazardous waste.
- 3. Continuously improve DTSC's application of science and technology.
- 4. Fully encourage and involve the public, including communities and local agencies, in a participatory process that ensures DTSC's decisions consider the needs of all affected parties.
- 5. Provide DTSC employees with the resources they need to perform their jobs.
- 6. Support DTSC employees with clear leadership and direction in an atmosphere that values diversity and ongoing communication.

AREAS OF EMPHASIS

The accomplishments and priorities in these areas of emphasis cross many DTSC program lines and contribute to attaining many Cal/EPA strategic goals and DTSC strategic objectives. In the interest of

brevity, this report outlines specific strategic goals and objectives met in the course of DTSC's environmental work in the organizational program accounts following these areas of emphasis.

Schools

State law requires that school districts conduct rigorous environmental review and cleanup activities under DTSC oversight in order to receive State General Obligation Bond funds for property acquisition or construction. Since 2000, DTSC has evaluated more than 1,000 school sites associated with 333 school districts in 48 of California's 58 counties. DTSC works with the districts to ensure that new school properties and expansion projects are environmentally safe for California's children. In addition, because of the success of the mandated program, increasing numbers of school districts approach DTSC to enter into voluntary agreements for site assessment and cleanup. California's program of strenuous environmental reviews of school sites is unique in the nation. Organizationally, the schools division is part of the site mitigation and brownfields reuse program and is supported by various other programmatic elements.

Accomplishments

1. School Cleanups. DTSC oversaw four school site cleanups, approved one remedial design, issued approvals for 10 removal action plans, and processed 13 California Environmental Quality Act (CEQA) plans, including three from the previous reporting period. In addition, DTSC provided determinations on 46 phase I (preliminary reports from the school districts); 36 preliminary endangerment assessments (representing DTSC's actual investigations into the sites), and entered into 50 environmental oversight agreements or voluntary cleanup agreements with school districts.

Cleanups Completed

- Dayton Heights Elementary School Playground Expansion, Los Angeles Unified School District. DTSC oversaw the removal of 110 cubic yards of lead-contaminated soil from this 0.5-acre site.
- Fifteenth Street Elementary School Addition, Los Angeles Unified School District. DTSC oversaw removal of 280 cubic yards of lead and cadmium-contaminated soil from this 0.5acre site.
- Jersey Elementary School Addition, Little Lake School District, Santa Fe Springs. DTSC completed the removal and off-site disposal of 9,000 cubic yards of contaminated soil from this site.
- Woodcrest Elementary and Junior High Schools, Chino Valley Unified School District. In December, the DTSC-approved plans to operate a mitigation system for methane in the soil became operational at this site.

Remedial Designs Approved

Park Avenue Elementary School, Los Angeles Unified School District. DTSC approved a
remedial design to excavate and dispose of approximately 39,000 cubic yards of soils
contaminated with arsenic, lead, and petroleum hydrocarbons from this existing elementary
school. The school site is a former landfill.

Cleanup Plans Approved

- Proposed Central Los Angeles New Learning Center #1 (former Ambassador Hotel Site), Los Angeles Unified School District. DTSC approved plans to remove 1,329 cubic yards of soils contaminated with polycyclic aromatic hydrocarbons, volatile organic compounds, and methane. The approved plan also addresses removing underground storage tanks from this 23-acre site.
- Banning New Elementary School #1, Los Angeles Unified School District. DTSC approved plans to eliminate the hazards posed by methane in soil gas, and address soil contaminated with petroleum hydrocarbons and polychlorinated biphenyls (PCB) from this 3.5-acre site.
- Commonwealth Elementary School Addition, Los Angeles Unified School District. DTSC approved plans to eliminate the hazards at the site with a methane control system.
- Hoover Elementary School Playground Expansion, Los Angeles Unified School District.
 DTSC approved plans to remove 68 cubic yards of lead-contaminated soils from this 0.66-acre site.
- State Street Elementary School Playground Expansion, Los Angeles Unified School District.
 DTSC approved plans to remove and dispose of 95 cubic yards of lead-contaminated soil from this nearly 0.5-acre site.
- Anaheim Mann Expansion Site, Anaheim City School District. DTSC approved plans to remove and dispose of 4,000 cubic yards of arsenic-contaminated soil from this 1.36-acre site.
- Lorin Griset New Elementary School #4, Santa Ana Unified School District. DTSC approved plans to remove and dispose of 1,605 cubic yards of arsenic-contaminated soil from this 9.2-acre site.
- Otsuka Elementary School, Santa Ana Unified School District. DTSC approved plans to remove and dispose of 2,000 cubic yards of soils contaminated with petroleum hydrocarbons from this 6.5-acre site.

- Bessie Carmichael New Elementary School Site, San Francisco Unified School District.
 DTSC approved plans to remove and dispose of 4,500 cubic yards of soils contaminated with lead, petroleum hydrocarbons, and PCBs from this 1.4-acre site.
- 2. Los Angeles Unified School District. DTSC continues to maintain its successful partnership with the Los Angeles Unified School District to expedite the environmental review and cleanup process. To date, the Los Angeles Unified School District has submitted applications to DTSC for review of 189 projects on new or expanding school sites. DTSC completed evaluations on 104 of these projects, identified 56 projects as requiring cleanups, and approved 58 to apply for construction funding. DTSC managers participate in weekly meetings with school district managers and consultants to address issues related to all school properties that are under investigation. These meetings assist the district in its goal of evaluating, investigating, and if necessary, cleaning up school properties in order to receive funding and proceed with building 180 new or expanded schools. DTSC continues to work closely with the school district on its best known proposed school site, the 35-acre Belmont Learning Center in downtown Los Angeles.
- 3. Pilot Project to Assist Financially Disadvantaged School Districts. Using funds available in the U.S. EPA preliminary assessment/site inspection grant, DTSC entered into contracts with two school districts to conduct preliminary endangerment assessments. The DTSC contractor will conduct investigations for the proposed Yorba Middle School site in the Chino Valley Unified School District and the proposed Lockeford Elementary School expansion site in the Lodi Unified School District.
- 4. **Organo-Chlorine Pesticide Study**. Using federal grant funds from U.S. EPA, DTSC is evaluating five prospective school sites that were residential properties, which may have been contaminated with organo-chlorine pesticides. Findings for the first of those sites, the proposed Weemes Elementary School in Los Angeles Unified School District, indicated elevated levels of pesticides resulting in a human health risk, requiring further action and possible cleanup.
- 5. **Proposed Emergency Regulations**. DTSC developed emergency regulations to Title 22, California Code of Regulations, to establish guidelines for a phase I environmental site assessment conducted at school sites, as required under the Education Code.
- 6. Environmental Guidance Documents. DTSC developed additional advisories for school districts and their contractors to assist them in preparing environmental assessment and investigation reports. These documents include: "Remedies for Methane Gas Contamination at School Sites," "Los Angeles Unified School District—Arsenic Study," and "Soil Gas Investigation at School Sites."
- School-Based Risk Assessment Model: Under an interagency agreement, DTSC and the Office
 of Environmental Health Hazard Assessment (OEHHA) are reviewing a risk assessment model
 developed for school sites.

Priorities

1. **Continue Facilitating School Construction and Cleanup**: Californians passed bond measures that will give California 500 more schools by the year 2004, with more to follow. Since all proposed school sites receiving State funding for acquisition or construction are required to go through a rigorous environmental review and cleanup process under DTSC's oversight, DTSC is very much a part of realizing the State's goal of decreasing class size.

Brownfields Reuse

DTSC has integrated existing programs and developed a number of new tools to facilitate reuse of brownfields properties in California. Brownfields are properties that are contaminated, or thought to be contaminated, and are underutilized due to perceived remediation costs and liability concerns. Redeveloping urban brownfields properties optimizes the use of existing infrastructure and protects our precious green space resources. Organizationally, brownfields reuse is part of the site mitigation and brownfields reuse program, supported by various other programmatic elements.

Accomplishments

- 1. **CLEAN Program Sites**: To assist in redeveloping urban brownfield sites, Governor Gray Davis signed into law the Cleanup Loan and Environmental Assistance to Neighborhoods (CLEAN) program in 2000. The CLEAN program funds environmental investigation and cleanup activities at six brownfield redevelopment projects:
 - East Bay Habitat for Humanity (Oakland, Alameda County). East Bay Habitat for Humanity received a \$425,000 CLEAN loan to investigate and clean up a former nursery and truck dismantling facility so it can build 20 to 25 affordable homes on the site. The site is contaminated with lead, petroleum hydrocarbons, and PCBs. On October 22, 2002, Congresswoman Barbara Lee and Oakland City Council Member Larry Reid joined representatives from Habitat for Humanity in a ceremonial presentation of the check by DTSC Director Ed Lowry.
 - Crossroads Investors III (Murrieta, Riverside County). CLEAN loan funds financed the site
 investigation and removal of 6,000 tons of lead-contaminated soil from a site formerly used
 for battery recycling on which 55 single-family homes will be built. Contractors completed
 cleanup activities in October 2002.
 - Marina Bay Development (Richmond, Contra Costa County). On June 27, DTSC awarded the Richmond Redevelopment Agency a \$1.9 million CLEAN loan to conduct site cleanup activities. The property is contaminated with lead and petroleum from shipbuilding activities conducted at the site in the 1940s and 1950s. DTSC approved the revised site investigation reports.
 - Vacaville Redevelopment Agency (Solano County). DTSC funded a \$237,000 CLEAN loan on July 24, 2002, to allow the city of Vacaville to clean up a former industrial property,

- allowing completion of the downtown revitalization project with the development of a mixeduse industrial and commercial property on the site. DTSC also approved the city's plans to begin the site characterization.
- Sun Chemical site (Los Angeles County). Using \$1 million in CLEAN loan funds, Butterfield Trails Inc. is cleaning up the former Sun Chemical Company facility in South Los Angeles for commercial and possibly residential housing in the form of lofts.
- Angeles Chemical site (Santa Fe Springs, Los Angeles County). Using \$950,000 in CLEAN loan funds, development entities are completing site characterization of the property to provide additional information that is necessary to complete the remedial investigation. The site is planned for commercial or light industrial use.
- 2. Other Brownfield Sites. DTSC has a broad range of programs and services to support brownfields redevelopment activities. Some of the major projects for which DTSC is providing oversight activities and direct site work are:
 - Santana Row Development (San Jose, Santa Clara County). On November 7–10, opening celebrations occurred for the Santana Row development, which consists of townhouses, lofts, villas, retail shops, and restaurants. DTSC oversaw the cleanup activities at this former agricultural and commercial site that was contaminated with DDT, arsenic, and lead.
 - Bay Street Project (Emeryville, Alameda County). Bay Street, a three-block shopping and
 entertainment center, opened on November 20. The site is the former location of a drum
 recycling facility, pigment manufacturer, pesticide repackaging, and trucking facility, and it
 was contaminated with pesticides, metals, and organics. DTSC provided technical oversight
 for the investigation and cleanup activities, and will remain involved with long-term
 operation and maintenance activities.
 - Galilee Harbor site (Sausalito, Marin County). DTSC oversaw the excavation and
 consolidation of contaminated sediments and soils on this former shipbuilding and
 maintenance site. The final cleanup action also required revegetating the shoreline and
 constructing a concrete parking lot.
 - Pacific Gas & Electric Decoto Road site (Union City, Alameda County). DTSC approved
 plans to excavate and dispose of soils contaminated with metals, PCBs, and petroleum
 hydrocarbons. The city of Union City is negotiating the purchase of the property for
 commercial development, a transit hub, and residential housing.
 - Former Whittaker-Bermite facility (Santa Clarita, Los Angeles County). DTSC is working
 with the U.S. Army Corps of Engineers to detect unexploded ordnance and to determine the
 extent of perchlorate and volatile organic compound groundwater contamination near the
 former munitions and explosives manufacturing facility.

- Cudahy City Park site (Los Angeles County). Utilizing State funds, DTSC completed the soil and groundwater characterization and the risk assessment. This park is adjacent to the previously mentioned Park Avenue Elementary School.
- 3. State Superfund Sites: California's Superfund program works on contaminated sites not listed on the federal National Priorities List (federal Superfund sites) that still pose a significant threat to public health and the environment. Under this program, DTSC uses State bond funds to clean up sites where responsible parties do not exist or do not have sufficient funds to pay for cleanup activities.
 - Roberts Tire site (Oakland, Alameda County). The city of Oakland required the owner of this
 former tire and auto facility to demolish the buildings on the site. However, the owners did
 not have funding to remove the lead contaminated soil, so DTSC used State funds to conduct
 the initial removal.
 - San Leandro Boulevard site (San Leandro, Alameda County). A paint factory fire in the 1960s resulted in solvent-contaminated soils at the site that are believed to be contributing to a regional groundwater plume. DTSC's contractor excavated the contaminated soil from the street and an adjacent property.
 - Chemical and Pigment Company site (Bay Point, Contra Costa County). A now-bankrupt company used this property to manufacture zinc chloride from waste galvanizing steel. The site has metal contamination, a 15,000-cubic-yard stockpile of soil, and abandoned process equipment and tanks. DTSC issued an order on this site.

Former Rail Yard Sites

- Cornfields site (Los Angeles County). DTSC approved the site characterization and work
 plan for the former 32-acre rail yard in downtown Los Angeles. Remediation activities just
 began on elevated levels of metals found in subsurface soil. The State Department of Parks
 and Recreation purchased the site with plans to create a major new park, open space, and
 recreation complex.
- Union Pacific Downtown Rail Yard (Sacramento County). Sacramento proposes to use this
 240-acre site, which has operated since the 1800s as the western hub of the transcontinental
 railroad, as an inter-modal transportation center and for commercial facilities, multifamily
 residential units, and possibly an athletic arena. DTSC is overseeing the shipment by rail of
 stockpiles of soil containing asbestos material destined for disposal. In addition, the city
 began construction on the new Seventh Street transportation corridor, which crosses the site.

Former Battery Recycling Sites

• H.S. Mann site (Del Rey, Fresno County). This State orphan site is located in a small farm community adjacent to fruit-packing plants. Former battery and metals recycling operations

- created high lead concentrations in soil and groundwater. DTSC completed the public comment period on the cleanup plans and environmental documents, and is preparing to approve the cleanup plan for the site.
- Alco Pacific, Inc. site (Los Angeles, Los Angeles County). DTSC used State orphan funds to
 define the extent of contamination at this former lead acid battery recycling site. Results
 showed elevated levels of metals in subsurface soil. DTSC also approved a risk assessment
 report for the site.

Former Plating Shops

- K&L Plating—89th Avenue site (Oakland, Alameda County). DTSC is working with the city of Oakland to remove contamination from the former plating shop site.
- Hard Chrome Products (Los Angeles, Los Angeles County). DTSC is using State orphan
 funds to investigate this former chrome plating facility, which is across the street from the
 Jefferson New Middle School. Contaminants in soil and groundwater include chromium VI
 and the solvents tetrachloroethylene (PCE) and trichloroethylene (TCE). The site is paved
 and fenced to prevent exposure to students, teachers and residents.

Former Wood-Treating Sites

• Alhambra Combined Facility (Alhambra, Los Angeles County). Contractors have installed an in-situ thermal oxidation system to treat 15,000 cubic yards of soil contaminated from former wood-treating operations. The system heats the soil to turn the contaminants into vapor, which is then extracted from the soil and destroyed under high heat. Using this innovative technology to destroy contamination will provide a permanent remedy for the site.

Former Steel Mills

• Kaiser Steel site (Fontana, San Bernardino County). DTSC oversaw capping of the tar pits at the former steel mill and removal of a 60-foot high slag pile. DTSC also provided oversight for cleanup of a 200-acre parcel, which became an industrial park.

Other Accomplishments

1. DTSC finalized guidance on cleanup remedies and corrective actions at sensitive use sites in a management memorandum, "Response Actions for Sites Where Future Use May Include Sensitive Uses." This document also addresses land use-restricting covenants.

Priorities

1. CLEAN Program Sites

• Marina Bay Development (Richmond, Contra Costa County). DTSC will complete its review of cleanup plans at the site by January 2003.

2. Other Brownfields Sites

Pacific Gas & Electric Decoto Road site (Union City, Alameda County). DTSC anticipates
that Pacific Gas & Electric will complete field work in spring 2003. Union City is negotiating
the purchase of the property for commercial development, a transit hub, and residential
housing.

3. State Superfund Sites

- Roberts Tire site (Oakland, Alameda County). DTSC will use State funds to further investigate what additional contamination exists under the building foundations.
- Chemical and Pigment Company site (Bay Point, Contra Costa County). DTSC will begin removal actions for all buildings, upgrade the stormwater runoff controls, and evaluate disposal options for the soil stockpile. Completion is planned for May 2003.
- K&L Plating—89th Avenue site (Oakland, Alameda County). Demolition of buildings will begin in January 2003. DTSC continues to work with the neighborhood association to address concerns about additional contamination caused by the former plating facility.
- 4. **Response Action Regulations**: By the end of February 2003, DTSC will begin seeking comments on these regulations developed by DTSC's hazardous waste management program, site mitigation, and brownfields reuse program. The response action regulations would establish a consistent removal action process for both the corrective action provisions of Chapter 6.5 and removals conducted under Chapter 6.8 of the Health and Safety Code. These proposed regulations provide clear direction to facilities and agencies undertaking corrective action, and they provide criteria for evaluating Certified Unified Program Agencies (CUPA) seeking authorization to implement corrective action.
- 5. Finalize Private Site Management Standard Regulations: The DTSC site mitigation and brownfields reuse program will issue final regulations concerning the private site management program. Regulations require that small, low-threat site cleanups undertaken without full DTSC oversight must be conducted by registered environmental assessors (REA II). DTSC anticipates that the regulations will allow more of those small sites to be cleaned up quickly, returning the property to reuse.

Recycling Military Facilities

DTSC oversees the investigation and cleanup of contaminated California properties currently or previously owned and operated by the various branches within the federal Department of Defense. Since the late 1980s, the federal government has closed 29 major and several other minor installations in California. In addition to the usual hazardous substances releases found at properties once used for industrial purposes, the cleanup of military facilities is frequently compounded by the presence of unexploded ordnance. DTSC is recognized nationally as a leader in devising ways to address this very

difficult problem. The DTSC site mitigation and brownfields reuse program supports the work at the military facilities. The DTSC hazardous waste management program also engages in various activities at some of the bases.

Accomplishments

- 1. **Transfer of Military Facilities**: DTSC is working to complete the early transfer of a number of parcels at closed and closing military facilities. "Early transfer" refers to the transfer of parcels on military facilities that are cleaned up or otherwise cleared for release for reuse before the entire installation is cleaned up.
 - Western Early Transfer—Mare Island Shipyard (Solano County). Governor Davis signed the
 early transfer covenant deferral in September to allow the U.S. Navy to transfer 2,800 acres
 to the State Lands Commission.
 - East Fort Baker (Sausalito, Marin County). DTSC certified that the U.S. Army's hazardous substance remediation is complete, allowing the Army to transfer the 93-acre property to the National Park Service for a conference center and recreational use.
 - Oakland Army Base (Alameda County). DTSC signed a consent agreement and a remedial
 action plan with the City of Oakland to allow the transfer of 380 acres from the U.S. Navy to
 the City and Port of Oakland to redevelop the site for industrial, commercial, and port reuses.
 - Hamilton Army Airfield (Petaluma, Marin County). There has been a delay of the transfer of 600 acres to the Coastal Commission. The new proposed transfer date is September 30, 2003.
 - Naval Communication Station (Stockton, San Joaquin County). The Navy transferred 406
 acres of uncontaminated property to the Port of Stockton in July 2002 as Phase II of the three
 transfer phases. The final phase is proposed for December 2003.
 - Hunters Point Shipyard (San Francisco, San Francisco County). The transfer of 86 acres has been delayed due to the recent detections of soil gas contamination migrating from an adjacent landfill. A soil gas treatment system and a cut-off wall have been installed, but the transfer will be delayed at least one year.
 - Long Beach Naval Complex (Long Beach, Los Angeles County). The proposed early transfer
 parcel contained a RCRA Hazardous Waste Storage Facility for which closure has not been
 certified. The recipient does not want the liabilities that are associated with RCRA. DTSC
 must certify closure of the storage unit and terminate corrective action prior to transfer.

2. Military Facility Cleanup

• El Toro Marine Corps Air Station (Irvine, Orange County). DTSC oversaw removal of soils contaminated with volatile organic compounds from the site to prevent further degradation of shallow groundwater.

- Point Vincente Interpretive Center (Rancho Palos Verdes, Los Angeles County). At a
 ceremony on November 8, 2002, DTSC received special thanks from Mayor Douglas Stern of
 Rancho Palos Verdes for assistance and oversight of an environmental cleanup of leadcontaminated soil at a former U.S. Army shooting range. The cleanup is required to expand
 the interpretive center.
- Seal Beach Naval Weapons Station (Orange County). DTSC approved plans to remove contaminated soil and conduct groundwater monitoring from a former demilitarization furnace facility.
- Vandenberg Air Force Base (Lompoc, Santa Barbara County). DTSC oversaw the removal of sandblast grit and soil contaminated with volatile organic compounds in three removals.
 DTSC will decide on the final site remedy after the U.S. Air Force completes the remedial investigation and feasibility study.
- Travis Air Force Base (Fairfield, Solano County). DTSC and U.S. EPA resolved a formal dispute with the U.S Air Force on restricting future land use on the base using a land use covenant. The resolution of this dispute helps determine the outcome of a number of other similar disputes with the military over similar land use restrictions.
- U.S. Naval Air Weapons Station, (City of China Lake, Kern County). On September 26, the DTSC hazardous waste management program signed a consent order settling serious hazardous waste violations found during April 1998 and May 2000 inspections. The Navy will pay a total of \$40,000, of which \$19,813 is a penalty and \$20,187 is a reimbursement of DTSC's costs. DTSC will credit \$5,000 toward the penalty for a Navy representative's completion of California Compliance School. The penalty also included a 100 percent reduction for self-disclosed violations. The Attorney General's office represented DTSC in the settlement negotiations.
- The Crossings site (San Bruno, San Mateo County). The U.S. Navy used this 20-acre site for
 its administrative, engineering, and personnel processing from 1943 until 2000, leaving
 behind soil contaminated with metals and pesticides. DTSC worked with the new property
 owners on investigating and removing contamination to facilitate the intended housing and
 commercial development.
- Naval Station, Treasure Island (San Francisco, San Francisco County). The bridge crossing site was transferred from the Navy to the Federal Highway Administration, then to CalTrans. The new span of the Bay Bridge is currently under construction.

3. Munitions and Ordnance

• National Munitions Response Committee. Participants reached a tentative agreement on regulatory oversight of ordnance cleanup at sites with unexploded ordnance. U.S. EPA, the

Department of Defense, military service branches, four states, and the National Association of Attorney Generals agreed to mutual sign-offs at key decision points in ordnance cleanups. They also developed a dispute resolution process and reservation rights for the parties. DTSC supports the work of this important committee.

- Ford Ord (Monterey County). DTSC signed the interim action record of decision for a controlled burn of vegetation and subsequent removal of highly unstable ordnance and explosives from former ranges near redeveloped areas. The project required a high level of community outreach, air pollution analysis, and toxicology input.
- Tourtelot cleanup (Benicia, Solano County). DTSC received the League of California Cities'
 Helen Putnam Award for Excellence for the superior interagency partnership and facilitation
 related to the Tourtelot ordnance and explosives cleanup.
- Former Whittaker-Bermite facility (Santa Clarita, Los Angeles County). DTSC is working with the U.S. Army Corps of Engineers to detect unexploded ordnance and determine the extent of perchlorate (used in rocket fuel) and volatile organic compound groundwater contamination near the former munitions and explosives manufacturing facility.

4. Other Accomplishments

- El Centro Naval Air Facility (Imperial County). DTSC received the Chief of Naval Operations' Environmental Cleanup Award for its involvement in cleaning up this military facility.
- The Office of Military Facilities. This office holds leadership positions in the federal facilities
 committee for the Association of State and Territorial Solid Waste Management Officials
 (ASTSWMO). ASTSWMO participates in national discussions with U.S. EPA and the
 Department of Defense to develop policy and resolve issues of concern to State and federal
 cleanup programs.
- 40-state Interstate Technology and Regulatory Council. DTSC continues to participate in this
 council that offers State regulators the only forum in this country for collective learning about
 new and innovative technologies. DTSC helped organize and deliver an unexploded ordnance
 basic training class in Monterey in December 2002.

Priorities

- 1. **Base Transfer and Cleanup**: DTSC is working to continue to complete the early transfers of a number of parcels of military facilities listed above.
- 2. **Unexploded Ordnance**: DTSC will continue to contribute to developing and implementing means to clean up unexploded ordnance.

3. Open Burn and Open Detonation

- China Lake Naval Weapons Station (China Lake, Kern County). DTSC is evaluating the China Lake Test Plan and information submitted by China Lake personnel as part of its open detonation permit. In a similar project in Northern California, DTSC will evaluate the technical merits of alternatives to open burning or open detonation of pyrotechnic wastes.
- Sierra Army Depot (Lassen County). DTSC expects to make a final permit determination for Sierra Army Depot in June 2003, potentially holding public workshops and hearings in the spring. Extensive public concern and controversy, plus litigation, stemming from the proposed open burn and open detonation activities at the depot, have delayed completion of this project.
- 4. **Perchlorate Contamination**: DTSC is working with the State Water Resources Control Board to develop an overview of perchlorate in groundwater based on samplings. DTSC is also researching treatment methods. As a chemical used in rocket solid fuel, perchlorate is a legacy of the military's presence in California. This substance is appearing in increasing numbers of wells throughout the state. While science concerning perchlorate's effect on the human body is not conclusive, it appears to affect the thyroid.

Enforcement

DTSC monitors hazardous waste transfer and storage, treatment, and disposal facilities for illegal activity. This includes electronic manifest surveillance and monitoring registered hazardous waste haulers. DTSC takes appropriate enforcement action against hazardous waste handlers when they violate hazardous waste requirements. Because of the complexity of hazardous waste laws, DTSC provides compliance assistance and emphasizes making its enforcement program clear and consistent. Another critical element of DTSC's successful enforcement program is the focus on ensuring that those who handle hazardous waste have sufficient financial mechanisms in place to either respond to a release or to close their facility safely.

Accomplishments

1. Manifest Discrepancies Regulations: The emergency regulations were re-adopted on December 2 pending the completion of the final regulations. The emergency regulations impose more stringent standards for reporting manifest discrepancies involving explosives and poisons. The final rulemaking package underwent a 45-day public notice and comment period and concluded with a public hearing on September 16. Changes were made to the regulation as a result of comments received. DTSC is preparing to issue a 15-day public notice and comment period, during which the public can comment on recent changes made to the regulations. DTSC anticipates filing the final package with the Office of Administrative Law by the end of March 2003.

2. Los Angeles Jewelry Mart (Los Angeles County):

- Fact Sheet. DTSC developed 12 fact sheets for the jewelry manufacturing industry and made them available in Spanish, Armenian, and Vietnamese in hard copy and on its Web site.
 These materials are part of continuing outreach and education to the jewelry manufacturing industry. The fact sheets address safe management practices, recommended alternatives to chemicals used in jewelry manufacturing, and risks posed by jewelry manufacturing waste streams.
- Workshop. DTSC conducted a workshop on May 17, 2002, for the building owners of the Los Angeles Jewelry Mart on the hazardous waste generator requirements and off-site treatment, storage, and disposal facility permitting requirements. DTSC is working with building owners to encourage the development of performance measures to monitor tenant hazardous waste activity. Those measures would prevent hazardous waste disposal and minimize a building owner's exposure to enforcement by DTSC or alleged illegal discharge to drains and air vents committed by tenants.
- Guidance Manual. DTSC's hazardous waste management and science, pollution prevention, and technology programs, in conjunction with the California Compliance School, produced a short film, "The Jewelry Makers' Guide to Hazardous Waste Management." DTSC developed the film script and supervised filming at representative manufacturers who employ pollution prevention practices in their operations. One of the subjects presented addressed replacement technologies for cyanide, which eliminates the source of cyanide discharges to the basement treatment systems found in many buildings throughout the jewelry district.
- 3. California/Mexico Border: DTSC provided compliance assistance to brokers, maquiladoras (engineers), and environmental consultants managing hazardous wastes in the U.S./Mexico border region. In collaboration with U.S. EPA, Cal/EPA, local agencies, and government authorities in Mexico, DTSC developed training courses for businesses and agencies in California and Mexico. The training addressed pollution prevention methods in selected industries, emergency response procedures, and techniques for sampling and analyzing wastes. DTSC participated in various coordination meetings with federal, State, and local agencies both in California and in Baja California.
- 4. **Backlog Reduction**: DTSC initiated formal enforcement action on the three remaining backlogged cases for which action had not been initiated at the time of the last Accomplishments & Priorities report. To minimize new backlogs, DTSC adopted the U.S. EPA enforcement policy that encourages initiation of formal enforcement action within 180 days following the discovery of a violation.
- 5. **Inspections, Complaints, and Enforcement (ICE) Database**: On July 1, the new inspections, complaints, and enforcement (ICE) data system went live. The ICE system replaces multiple systems established during the mid-1980s to track and collect data regarding enforcement

activities. On December 31, 2001, DTSC entered into a contract with Covansys Corporation to develop this new database system containing information on inspections, complaints, and related enforcement actions taken by DTSC. Since then, DTSC staff has reviewed ICE data to correct errors, populate data fields, and test various reports.

6. **AERC.Com, Inc. (formerly Mercury Technologies International) (Hayward, Alameda County)**: In November, DTSC and the Attorney General's office settled with AERC.Com for violations found in November 1999, including receiving and storing polychlorinated biphenyls (PCBs) in lighting fixtures without a permit. The company will pay \$84,000; of this amount, \$76,500 is a penalty and \$7,500 is reimbursement for DTSC costs. DTSC will apply a credit of \$5,000 for the site manager's completion of California Compliance School, a contracted vendor, and a credit up to \$20,500 for a supplemental environmental project. AERC.Com has a series "A" standardized permit to reclaim mercury from spent fluorescent and high-density lamps.

Priorities

- Jewelry Mart: DTSC will remain active in the Jewelry Mart task force and coordinate activities
 with the city and county of Los Angeles. DTSC will continue compliance assistance outreach to
 better educate property owners and the jewelry industry. In spring 2003, DTSC will propose
 regulations to add aqueous waste cyanide to the permit-by-rule tier of self-implementing
 authorization. The proposed regulations will limit the concentration of cyanide that can be treated
 without additional safety analysis.
- 2. Identifying Non-Compliance: DTSC will use its new Internet browser-based hazardous waste tracking system and other sources of information to systematically identify persons operating out of compliance with hazardous waste laws and regulations. DTSC will focus its efforts on entities managing universal wastes, taking enforcement action when appropriate, and providing compliance assistance.
- 3. **Overloaded Trucks**: DTSC intends to adopt regulations governing the transfer of contaminated soil from overloaded dump trucks to other vehicles before arrival at their final destinations. These regulations will clarify that an existing regulatory exemption applies to the transfer of contaminated soil from an overloaded truck. The regulations will also require, as conditions of the exemption, that the transporter take specified measures to prevent releasing hazardous waste during the bulk transfer.

Pollution Prevention

California is best protected from dangers associated with hazardous waste when that specific waste is not created in the first place. DTSC's pollution prevention staff works with State and local agencies, businesses, and non-governmental agencies to offer source reduction, reuse, and recycling to promote pollution prevention. In addition, integration of pollution prevention strategies in both regulatory and operational programs is emphasized. From inspectors in regional offices and scientists in the

hazardous materials laboratories to public outreach staff, the DTSC team works to reduce hazardous substances, limit waste, and preserve the environment.

Accomplishments

1. Mercury Elimination

- Regulations. In December, DTSC adopted regulations that list four mercury-containing products. When discarded, these products are to be classified as hazardous wastes, regardless of mercury concentration. The products are motor vehicle light switches, non-motor vehicle mercury switches (from appliances), mercury-containing lamps (florescent tubes), and mercury novelty items to which mercury has been added (children's shoes with lights in the soles). The regulations also identify these and six other mercury-containing hazardous wastes as universal wastes and establish universal waste management standards for them. As part of the rulemaking effort, DTSC subjected its final mercury report to scientific peer review by faculty at the University of California, Santa Cruz, and California State University, Chico. The regulations become effective in March 2003.
- Voluntary Hospital Mercury Reduction Project. Following up on a 1998 U.S. EPA/American
 Hospital Association initiative, DTSC and the State Department of Health Services issued a
 joint challenge to California hospitals calling for the elimination of mercury. Five hospitals
 have been recognized for meeting the standards by removing 90 to 95 percent of their
 mercury, 8 to 15 kilograms per facility:

Kaiser Permanente Fontana Medical Center.

Kaiser Permanente Fresno Medical Center.

Kaiser Permanente Roseville Center.

Kaiser Permanente Santa Rosa Medical Center.

Stanford Hospitals and Clinics.

2. Electronic Waste Management

- Research. DTSC continues to evaluate consumer electronic products to ascertain whether they contain hazardous substances that may escape into the environment if not handled properly. DTSC completed an analysis of selected consumer electronic products to determine the amounts of lead, copper, and other elements—plus brominated flame retardants those products contain. The lab also presented technical papers on brominated flame-retardants in e-waste at a conference organized by U.S. EPA Region 9.
- Regulations. In December 2002, DTSC adopted regulations for managing cathode ray tube (CRT) materials and consumer electronic devices under universal waste. These regulations

replace the emergency regulations currently in place for the management of CRTs and will be effective in March 2003.

- 3. Vehicle Service and Repair Project: DTSC trained more than 1,000 mechanics and State and local government regulators to implement pollution prevention techniques at vehicle repair shops. The vehicle repair industry in California constitutes more than 33,000 individual businesses. Of these, nearly half are located in Los Angeles. Typical wastes include used oil, waste anti-freeze, spent lead-acid batteries, waste solvents, clarifier liquids and sludge, and contaminated absorbent and shop rags. In conducting follow-up surveys, DTSC found that almost 60 percent of businesses that attended the training implemented one or more of the recommended pollution prevention measures. In addition, DTSC is working with corporate partners that include Napa Auto Parts, Ford/Lincoln/Mercury, Honda, and the California Automobile Association to encourage wider adoption of pollution prevention practices. Finally, Shasta College, with financial support from DTSC, completed pollution prevention curriculum for mechanics and is sharing it with other community colleges throughout the State.
- 4. **Source Reduction Planning Act**: DTSC completed a follow-up assessment of the 300 largest generators who failed to submit required source reduction planning and reporting documents. These generators produce more than 80 percent of the waste from the non-reporting businesses. Follow-up enforcement efforts resolved the status of all but two of these generators. DTSC has also initiated follow-up efforts with approximately 2,200 facilities that "self-certified" as being exempt from this law. DTSC screened manifest records to reduce this number to 300 to be targeted for further review. In December 2002, DTSC released a new source reduction planning guidance manual for the documents due in September 2003.
- 5. **Chemical Industry Assessment**: DTSC is reviewing source reduction plans and reports from 20 of the largest chemical manufacturers in California (excluding petroleum refineries). The review entails assessing source reduction progress within the industry and identifying viable and transferable source reduction measures.
- 6. **Body Burdens in Humans**: U.S. EPA Region 9 awarded DTSC a pollution prevention grant to measure contaminants in breast milk for women. This research will contribute to the body of scientific knowledge relating to persistent bioaccumulative contaminants.
- 7. **Local Government**. DTSC provided extensive support to local government pollution prevention roundtable committees, including local governments in the northern San Joaquin Valley (from Lodi to Merced), the Sierra Nevada region (from Nevada City to South Lake Tahoe) and the northern Sacramento Valley area (greater Redding). Other efforts supported 100 local government entities engaged in Pollution Prevention Week activities from September 16–22. DTSC printed and distributed 20,000 posters and 4,000 T-shirts statewide to promote pollution prevention. In addition, DTSC co-sponsored the tenth annual Western Regional Pollution Prevention Network conference in Santa Barbara. The conference drew 200 participants from the

states of California, Hawaii, Nevada, and Arizona, as well as representatives from U.S. EPA and Mexico.

Priorities

1. Mercury Elimination

- Implementation of the California Mercury Reduction Act. As required by the California Mercury Reduction Act (SB 633, Sher, Chapter 656, Statutes of 2001), DTSC will provide information and technical support to automobile dismantlers, auto repair shops, and the public. Education will focus on how to remove mercury switches in vehicles and replace them with non-mercury-containing switches.
- Implementation of the Mercury and Electronic Hazardous Waste Regulations. DTSC will conduct outreach and education efforts to the public and regulated stakeholders to provide guidance on the universal waste management standards. DTSC will promote compliance with the new regulations.
- Pollution Prevention Grant. DTSC received a U.S. EPA Region 9 pollution prevention grant to fund a proposed mercury reduction project in partnership with the Los Angeles chapter of the nonprofit organization Physicians for Social Responsibility. The project, Partnerships for Mercury Pollution Prevention, will provide mercury-free sphygmomanometers (blood pressure gauges) in exchange for mercury-containing units to 25 community clinics statewide. Physicians for Social Responsibility will also conduct training sessions on the dangers of mercury for clinic staff. In addition, mercury-free fever thermometers and educational materials will be provided to clinic patients. The proposed project supports ongoing efforts by DTSC to address mercury contamination in the state's environment.
- Voluntary Hospital Mercury Reduction Project. DTSC will schedule an awards and
 recognition ceremony in spring 2003 to recognize hospitals that have met the mercury
 reduction challenge and will continue to work with the State Department of Health Services
 to recruit additional California hospitals to participate. DTSC will expand the project to
 include other project sponsors, such as local sewer agencies and Certified Unified Program
 Agencies.
- 2. **Vehicle Service and Repair Project**: DTSC will continue to provide training to local government and facility operators. More emphasis will be placed on solidifying corporate partnerships, and DTSC will propose a "model shop" program for them. DTSC will also expand the program vehicle fleets, including State-run fleets. A vendor directory will be launched on the DTSC Web site listing sources for pollution prevention equipment and technologies.
- 3. **Source Reduction Planning Act**: During the next six months, DTSC will conduct a series of training and outreach activities to remind generators of the need to prepare new source reduction

- plans. This will include a mass mailing to more than 3,500 generators and workshops for Certified Unified Program Agency inspectors.
- 4. **Chemical Industry Assessment**: DTSC will complete its source reduction plan reviews and provide feedback to the industry to assist them in preparing their 2003 documents.
- 5. **Body Burdens in Humans**: DTSC will develop protocols and methods and begin analyzing contaminants in breast milk under the grant from U.S. EPA Region 9.
- 6. **Local Government**: DTSC will continue to support local government pollution prevention committees and will begin work on activities for the 2003 Pollution Prevention Week.

Public Participation and Environmental Justice

DTSC actively engages communities throughout California on site cleanups and permit determinations. DTSC invites comments from all interested people on key decisions, always going to the affected community to engage in various forms of dialogue. In all cases, our project teams are sensitive to cultural issues, language, and educational levels. DTSC has an interim environmental justice policy in place. The policy states in part that the department is committed to ensuring that all of the State's populations, without regard to color, national origin, or income, are equally protected from adverse human or environmental effects as a result of the department's policies, programs, or activities. DTSC will look for further opportunities to instill the principles of environmental justice into all projects and processes.

Accomplishments

- 1. Streamlining School Site Public Participation
 - DTSC developed a standardized community assessment and public notice and fact sheet format specifically for school projects. This standardization ensures quick turnaround of these work products, thus avoiding delays in assessing and cleaning school sites.
 - DTSC initiated efforts to improve public involvement at proposed school sites. In response to
 heightened public interest, DTSC sponsored community meetings to coincide with existing
 meetings held by such groups as the PTA or school faculty. These gatherings provided an
 efficient forum for the most impacted and interested portions of the community, so they can
 better understand information about contamination and any proposal to clean up the
 contamination.
- 2. Increased Public Involvement: DTSC implemented various activities designed to enhance public understanding of DTSC processes and to involve the public early and continuously in DTSC decision-making:
 - Conducted 40 public meetings.

- Held six public hearings.
- Participated in 45 restoration advisory board (RAB) meetings.
- Participated in 42 interagency meetings.
- Issued 94 fact sheets.
- Issued 54 public notices.
- Conducted 55 community assessments.
- Produced 24 public participation plans.
- 3. **Educational Video**: DTSC produced its first five-minute educational video for residents at the William Mead Homes site in Los Angeles, at no cost to DTSC. The video explains the type of contamination and health effects and how DTSC plans to remove the material. Through its community assessment process, DTSC determined that a video would be more useful to community members than written materials. DTSC translated the video into Spanish and Vietnamese and will assess the effectiveness of this method of public involvement.

4. Environmental Justice

- Cal/EPA's Environmental Justice Advisory Committee Meetings. DTSC participated in Cal/EPA's Environmental Justice Advisory Committee meetings, strategy workshops, and internal work groups for coordination of DTSC's environmental justice efforts.
- Environmental Justice Fact Sheet. DTSC developed a fact sheet that defines the term and
 offers an overview of environmental justice. A fact sheet in both English and Spanish is on
 the DTSC Web Site.
- Environmental Justice Outreach. The DTSC outreach programs continue to develop and distribute translated documents in communities in which English is a second language. Of the approximately 100 developed fact sheets, DTSC had 40 percent translated into Spanish, Vietnamese, Chinese, Hmong, or Armenian. Additionally, DTSC continues to provide interpreters at public meetings where its community assessments reveal the possibility that audience members may not speak English.

Priorities

- 1. **Public Participation Manual**: DTSC will complete final revisions to the *Public Participation Policy and Guidance Manual* and provide training to DTSC staff.
- 2. **Continuous Improvements**: DTSC will continue to put a high priority on its outreach efforts at schools and other projects to ensure that its decision-making process and judgments are understandable and accessible to all.

3. **Handbook on Contaminants**: DTSC will assist Cal/EPA in developing a user-friendly handbook about contaminants frequently found in California's air, water, and soil.

4. Regional Environmental Justice Community Assessments

- East Los Angeles. DTSC will complete its first community assessment in East Los Angeles. The assessment will provide demographics, site and facility locations, community issues, and identification of community leaders. The assessment will also provide various methods to address environmental impacts on a site-specific basis.
- West Oakland. DTSC will develop a work plan to produce a similar assessment to support a regional outreach strategy for West Oakland.

Site Mitigation and Brownfields Reuse

Site mitigation refers to the process by which hazardous substances sites are identified and investigated, and in which cleanup alternatives are developed and implemented. Brownfields are urban properties that have remained dormant for some time due to real or perceived contamination from past use of the site. The site mitigation and brownfields reuse program has projects in the areas of school property evaluation and cleanup, military facilities, statewide cleanup operations (including the State and federal Superfund sites), emergency response, and clandestine drug lab cleanup. The program accomplishes the cleanup of contaminated sites in California by either ensuring that those responsible for the contamination take all necessary actions or by performing those actions itself. Many of its goals and accomplishment appear in the areas of emphasis, especially in schools, recycling military facilities, and brownfields reuse.

Cal/EPA Goal 4: Communities free from unacceptable human health and ecological risks, due to exposure from hazardous substances and other potentially harmful agents.

Cal/EPA Goal 5: Reduce or eliminate the disproportionate impacts of pollution on low-income and minority populations.

DTSC Strategic Objectives:

Establish and implement protective and consistent cleanup programs and standards that can serve as a model for California and the nation.

Ensure that we identify sites and prioritize our actions so that hazardous substances sites that are of the greatest impact to public health or the environment are characterized and remediated expeditiously.

Restore contaminated sites to beneficial use in a manner that protects public health and the environment.

Reduce or eliminate disproportionate effects of pollution on low-income and minority populations.

Ensure that the broadest range of environmental information is understandable, available, accessible, and useful.

Strive for the broadest possible public involvement in site and facility decisions.

Ensure that the California Environmental Quality Act (CEQA) is appropriately utilized in making project decisions.

Ensure DTSC's resources are focused on its highest priorities and core competencies.

School Property Evaluation and Cleanup

The DTSC school property evaluation and cleanup program accomplishments and priorities were previously listed under "Areas of Emphasis" on page 37.

Statewide Cleanup Operations

DTSC is responsible for overseeing cleanup activities at State and federal Superfund sites, as well as at many brownfields sites where perceived or real contamination stifles reuse due to potential environmental cleanup costs and liabilities. The accomplishments and priorities of the brownfields reuse element of statewide cleanup operations appear under "Areas of Emphasis" on page 40.

Accomplishments

- 1. **State Superfund Sites**: California's superfund program works on contaminated sites that are not listed on the federal national priorities list, yet pose a significant threat to public health and the environment. Under this program, DTSC uses State funds to clean up sites at which responsible parties do not exist or do not have sufficient funds to pay for cleanup activities.
 - Mangels Ranch (Suisun City/Fairfield, Solano County). The use of insecticides at this former cattle ranch resulted in contaminated soil. DTSC approved plans to excavate and dispose of the hazardous materials.

Tire Fire Sites

- Westley Tire Fire (Westley, Stanislaus County). DTSC joined with the Central Valley
 Regional Water Quality Control Board (CIWMB) and the California Integrated Waste
 Management Board to oversee cleanup of the dramatic and destructive 1999 tire fire.
 Contractors excavated and removed approximately 180,000 cubic yards of waste and burned
 tire debris.
- Tracy Tire Fire (Tracy, San Joaquin County). DTSC and the CIWMB are collaborating on the cleanup of this site through a memorandum of agreement. DTSC reviewed a removal assessment report, a remedial investigation, and feasibility study. The agencies also chose a consultant and a field contractor to investigate and remediate the site.

Oil, Gas, and Town Gas Sites

- William Mead Homes (Los Angeles County). DTSC is providing technical oversight to the
 Housing Authority of the city of Los Angeles during the preparation of plans to remove lead
 and petroleum hydrocarbon-contaminated soil from the site. William Mead Homes consists
 of 415 units, housing 1,400 residents. DTSC also produced its instructional video for this site
 (see page 55).
- Santa Ana Manufactured Gas Plant (Santa Ana, Orange County). DTSC is overseeing cleanup activities at this former manufactured gas plant site. Local artists are painting murals on the wall, constructed around a portion of the site as part of the cleanup.

Naturally-Occurring Asbestos Sites

Garden Valley Discovery (Garden Valley, El Dorado County). DTSC is providing assistance
to identify potential sources of naturally-occurring asbestos and to assess releases from roads
surfaced with serpentine, the mineral that is a source of asbestos. In November, DTSC
released the final report of soil sampling at roads, bus stops, and quarries. DTSC also
completed preliminary field work to test asbestos emissions from serpentine-surfaced roads.

Pesticide-Contaminated Sites

• University of California, Riverside (Riverside County). DTSC oversaw the excavation and on-site treatment of 40,000 tons of soil contaminated by pesticides and PCBs. Contractors used low-temperature thermal desorption to treat the soil.

Regional Groundwater Plume Sites

• South Fresno Regional Groundwater Plume (Fresno County). DTSC reached agreement with responsible parties on the cleanup activities to be conducted at this regional groundwater site.

Auto Salvage Sites

• S.R. Kilby (Rosamond, Kern County). This 7-acre State orphan site is a former auto salvage operation. DTSC found high lead soil contamination and has completed most of the site investigation activities, including arsenic background soil sampling.

PCB-Contaminated Sites

• Fieldstone property (Huntington Beach, Orange County). DTSC performed sampling in backyards of several homes adjacent to the Fieldstone property next to the Bolsa Chica wetlands. The owners of the property are under an order to develop plans to further investigate and clean up PCB contamination from the site.

- 2. Federal Superfund Sites: Federal Superfund projects involve sites placed on the national priorities list by U.S. EPA, following a process specified in federal law. U.S. EPA oversees and directs investigation and cleanup activities at these sites. The State participates with U.S. EPA in these activities and provides 10 percent of the matching funds toward these efforts. Once investigations and cleanup work are completed, DTSC monitors the ongoing operation and maintenance of the remedy.
 - Casmalia Resources Facility (Casmalia, Santa Barbara County). DTSC provided oversight of
 cap construction and redesign at two former landfills and is working with U.S. EPA to
 recover past response costs and develop a consent decree with potentially responsible parties.
 - Stringfellow Superfund site (Glen Avon, Riverside County). DTSC completed major repairs
 at the pre-treatment plant and installed 28 new monitoring wells in the community to
 determine the extent of a groundwater plume. All remaining residents within the area of
 perchlorate contamination were connected to the local municipal water supply. Perchlorate is
 used in rocket fuel.
 - Montrose Chemical Corporation (Los Angeles, Los Angeles County). DTSC provided support to U.S. EPA on the removal of 10,000 cubic yards of DDT-contaminated soils from the front yards of 22 homes adjacent to the Montrose Superfund site. Contractors completed all remedial and landscaping redevelopment work. In addition, DTSC collected \$172,000 from three court settlements related to the liability lawsuits.
 - Del Norte County Pesticide (Crescent City, Del Norte County). U.S. EPA de-listed this site
 from the national priorities list (for example, the Superfund list) on September 19. DTSC will
 oversee ongoing groundwater monitoring activities. From 1970 to 1981, the property owners
 stored pesticide containers from local agricultural and forestry-related industries at the site,
 resulting in soils contaminated with herbicides, pesticides, and solvents.
 - GBF/Pittsburg Landfill (Antioch/Pittsburg, Contra Costa County). U.S. EPA proposes listing
 this site on the national priorities (Superfund) list. DTSC is the lead agency for overseeing the
 work at the site. In August, DTSC approved the remedial design and implementation plan for
 the first phase of the groundwater pump and treatment system.

Priorities

1. State Superfund Sites

 Mangels Ranch (Suisun City/Fairfield, Solano County). DTSC contractors will backfill the area contaminated with pesticides with clean soil and complete all field work by early 2003.

Oil, Gas, and Town Gas Sites

• Santa Ana Manufactured Gas Plant (Santa Ana, Orange County). DTSC will complete cleanup activities at this site by mid-2003.

2. Federal Superfund Sites

 GBF/Pittsburg Landfill (Antioch/Pittsburg, Contra Costa County). DTSC will oversee construction of the first phase of groundwater pump and treat system that will be operational in May 2003.

Emergency Response and Statewide Operations

DTSC has trained responders who provide immediate assistance during sudden or threatened releases of hazardous materials.

Accomplishments

- 1. **Emergency Response Program**: DTSC completed emergency removal actions at 1,100 illegal drug lab sites seized by State and local enforcement agencies and at 60 other non-lab-related sites.
- 2. **Ford City** (**Kern County**): DTSC completed an initial assessment of residential properties adjacent to the Naval Petroleum Reserve in Ford City, finding high levels of lead at or near the surface of seven homes.
- Illegal Drug Lab Remediation: DTSC developed a listing of chemicals of concern that are
 produced at illegal drug labs and forwarded it to OEHHA for its evaluation and assessment of
 these chemicals.
- 4. **Clandestine Drug Lab Testing**: DTSC's hazardous materials laboratory began evaluating immunoassay tests with the potential to quickly and inexpensively test former clandestine drug labs. In cooperation with the Department of Justice and OEHHA, DTSC completed a test plan for the use of immunoassays in clandestine drug labs.

Priorities

DTSC implements these general fund-financed programs through its site mitigation and brownfields reuse program. California's severe fiscal crisis will seriously curtail DTSC's ability to continue the programs described above.

1. **Clandestine Drug Lab Testing:** DTSC and OEHHA will complete an evaluation of immunoassays and other field testing for former clandestine drug labs.

Hazardous Waste Management

The hazardous waste management program affects every household and business in California through its regulatory efforts. DTSC directly oversees 147 permitted or otherwise authorized

facilities, 936 registered transporters, and 726 facilities or generators currently engaged in corrective action. Three divisions perform the following tasks:

- Inspections.
- Enforcement actions.
- Determinations on applications for permits and other grants of authorization.
- Oversight of corrective action.
- Development and adoption of regulations to define hazardous waste and how it is to be managed.
- Oversight of CUPAs, which are delegated responsibility for implementing the hazardous waste generator program at the local level.
- Many of its accomplishments and priorities appear under "Areas of Emphasis" beginning on page 36.

Cal/EPA Goal 4: Communities free from unacceptable human health and ecological risks due to exposure from hazardous substances and other potential harmful agents.

Cal/EPA Goal 5: Reduce, if not eliminate the disproportionate impacts of pollution on low-income and minority populations.

DTSC Strategic Objectives:

Monitor California's hazardous waste storage, treatment, and landfill capacity to manage all its hazardous waste in a safe and efficient manner.

Prevent future hazardous waste contamination of the environment by ensuring proper management and provision for adequate financial assurance.

Reduce the dependence on treatment and disposal by reduction, reuse, and recycling.

Reduce the adverse impacts of hazardous waste going across the California-Mexico border.

Build on the current regulatory framework toward a performance-based system that fosters continual improvement in hazardous waste management, leading to a sustainable California.

Ensure that the broadest range of environmental information is understandable, available, accessible, and useful.

Strive for the broadest possible public involvement in site and facility decisions.

Ensure the California Environmental Quality Act (CEQA) is appropriately utilized in making project decisions.

Ensure DTSC's resources are focused on its highest priorities and core competences.

Compliance and Enforcement

Through its enforcement efforts, DTSC works to ensure that hazardous waste generators, transporters, and hazardous waste management facilities meet State and federal requirements. The program monitors hazardous waste transportation, storage, treatment, and disposal facilities and takes appropriate action against handlers who violate hazardous waste requirements. The program also provides technical investigation assistance and expert testimony for civil and criminal investigations. All of the statewide compliance division accomplishments and priorities are detailed under the enforcement section of "areas of emphasis."

Permitting

DTSC ensures that hazardous waste is properly managed at facilities that treat, store, and dispose of hazardous waste by enforcing regulations through its permitting and corrective action processes. California has a five-tier permitting program that matches the statutory and regulatory requirements imposed upon each category of hazardous waste facility to the degree of risk posed by them. The five permitting tiers, in descending order of regulatory oversight, are:

- 1. Full permit tier for off-site and on-site Resource Conservation and Recovery Act (RCRA) activities and selected non-RCRA activities.
- 2. Standardized permit for off-site and on-site wastes and activities regulated in California but not under RCRA.
- 3. Permit-by-rule tier for specified on-site activities.
- 4. Conditional authorization tier for other specified on-site activities.
- 5. Conditional exemption tier for still other specified on-site activities.

DTSC issues approximately 120 hazardous waste facility permits to industrial companies under the full and standardized permit tiers. DTSC regulates approximately 5,200 businesses that conduct lower-risk on-site treatment and storage activities through streamlined tiered permitting processes in the permit-by-rule and conditional authorization and exemption tiers.

Accomplishments

1. Final Permit Determinations

 Dow Chemical Company, Boiler and Industrial Furnace Permit (Pittsburg, Contra Costa County). DTSC received numerous comments from Californians for Renewable Energy and Communities for a Better Environment during the second 45-day public comment period held for the draft permit and CEQA initial study and negative declaration that ended in November.

2. **Draft Permit Determinations**

Evergreen Oil, Inc., used oil recycler (Newark, Alameda County). DTSC began reviewing the
revised part "B" application to expand the capacity of this used oil recycling facility. DTSC is
also preparing a project description that the city of Newark can use in its environmental
document.

3. Closure Verifications

- Safety Kleen Systems, Inc., solvent recycling facility (Oakland, Alameda County) and Safety Kleen Systems, Inc., treatment/storage facility (Salida, Stanislaus County). DTSC has delayed work on these closure verifications because it has reassigned staff to projects of higher environmental concerns.
- 4. **Financial Responsibility/Closure Cost Update Project**: DTSC has made significant progress toward the goal of ensuring that all hazardous waste facilities have adequate financial resources to close in an environmentally protective manner. DTSC is updating closure-cost estimates for each facility, using the best available data and models. DTSC is coordinating with the facilities to ensure that the financial assurance mechanisms are adequately funded.
- 5. Treated Wood Waste: Between 1981 and 1995, DTSC granted variances and a waste classification, allowing management of treated wood waste as non-hazardous or disposed of at non-hazardous waste landfills. Analytical data has shown that treated wood waste can exceed the hazardous waste threshold levels for pentachlorophenol, copper, arsenic, and chromium. DTSC is reviewing the variances and waste classification to ensure consistency with existing law. For example, new recycling laws have made several of the variances unnecessary. DTSC staff met with the State Water Resources Control Board to discuss the management of treated wood waste at non-class I landfills.
- 6. Waste Code Revision Regulations, R-98-03: DTSC developed regulations to revise its waste code and handling code systems after seeking public comment on the issue, including extensive input from the regulated community. The proposed changes will provide DTSC with better information on hazardous waste generation and management and will address a number of problems with the current coding system.
- 7. **Sierra Army Depot (Lassen County)**: In October 2002, the Depot submitted a request to DTSC to review the permit application due to the results of a litigation settlement. DTSC has been working with the Depot to determine the revised project details and subsequent documents. DTSC will update and revise the environmental, health risks, and technical analyses. DTSC plans

to conduct a public workshop in the spring of 2003 and public notice the draft permit determinations of June 2003.

Priorities

1. Final Permit Determinations

- Quemetco, Battery Recycler (City of Industry, Los Angeles County). In January 2003, DTSC expects to make a final permit decision for Quemetco. DTSC delayed its final decision to respond to extensive comments on both the draft permit and the draft environmental impact report from the public and from the facility.
- Dow Chemical Company, Boiler and Industrial Furnace Permit (Pittsburg, Contra Costa County). DTSC anticipates responding to comments and making a final permit determination by February 2003.

2. Draft Permit Determinations

- Evergreen Oil, Inc., used oil recycler (Newark, Alameda County). DTSC anticipates that the environmental document needed for DTSC to make a permit determination will be completed by the city of Newark by June 2003.
- Romic Environmental Technologies (East Palo Alto, San Mateo County). DTSC expects to
 issue the public notice for the permit in June 2003 and conduct a public workshop on the
 human health risk assessment in mid-March 2003. DTSC has made substantial progress to
 resolve outstanding issues with the commercial solvent recycling facility related to the
 certification of tanks and secondary containment.
- 3. **Post-Closure Permit Project**: DTSC plans to issue at least five additional post-closure permits by June 2003. Post-closure permits ensure that former hazardous waste management facilities that are closed with waste in place are properly maintained and monitored to protect human health and the environment. The permits also ensure that the facilities have adequate financial resources to perform such maintenance and monitoring for at least 30 years after closure. DTSC calls in and processes post-closure permit applications as sites complete closure or corrective action, or as their existing permits approach 10-year expiration dates.
- 4. **Financial Responsibility/Closure Cost Update Project**: DTSC will review the majority of cost estimates for closure and post-closure in the state and work toward implementing any required revisions in financial assurance mechanisms.
- 5. **Treated Wood Waste**: DTSC, in cooperation with the California regional water quality control boards, is identifying non-class I landfills that may be interested in obtaining new authorization for acceptance of treated wood waste. DTSC plans to discuss with all stakeholders the appropriate management requirements and alternatives for treated wood waste in early 2003.

6. **Waste Code Revision Regulations, R-98-03**: After seeking formal public comment, DTSC will finalize regulations to revise its waste code and handling code systems.

State Regulatory Programs

In its State regulatory programs division, DTSC promulgates and adopts a variety of regulatory standards to define hazardous waste identification and management standards, both in response to statutory mandates and to refine the scope of its regulatory programs. In addition, to maintain its authorization from U.S. EPA as an authorized State program, DTSC must notice its regulations to align them with amended federal regulations. This division also supports the CUPA programs and oversees the lower-tier permits.

Accomplishments

- Phase I Environmental Assessment Checklists: DTSC received nine phase I environmental
 assessment checklists from permit-by-rule and conditional authorization facilities during the
 second half of 2002.
- Phase I Environmental Assessment Verification Inspections: DTSC completed 13 inspections
 to verify the results of the tiered permitting phase I environmental assessment checklist. This
 process assesses conditions at sites where permit-by-rule and conditional authorization facilities
 are or have operated. DTSC completed six inspections at sites referred to DTSC by CUPAs and
 U.S. EPA.
- Draft Corrective Action Consent Agreements: DTSC issued six draft corrective action consent
 agreements to facilities identified as needing further investigation on the phase I environment
 assessment checklist.
- 4. **Finalized Corrective Action Consent Agreements**: DTSC executed 17 corrective action consent agreements for tiered permitting and hazardous waste generator sites requiring corrective action for releases of hazardous waste to the property or surrounding area.
- 5. Manifest Discrepancy Regulations: See 48 in the Enforcement section of "Areas of Emphasis."
- 6. Waste Code Revision Regulations R-98-03: DTSC will continue to develop regulations to amend its waste code system. The proposed regulations, currently undergoing internal review, will provide information on waste management, waste types, and hazardous characteristics of waste. DTSC plans to hold a public workshop to explain the proposed regulations at the time of the public notice with completion of the internal review expected in the summer of 2003.

Priorities

1. **Tiered Permitting Phase I Environmental Assessments and Corrective Action**: DTSC will conduct 21 phase I environmental assessment verification inspections in the first half of 2003 and will execute 13 corrective action consent agreements during the same period.

- 2. **Aqueous Waste Cyanide Treatment**: See the Jewelry Mart item under Enforcement in "Areas of Emphasis" on page 49.
- 3. **Lead Report**: DTSC will finalize a waste stream study that examines the environmental and health effects of lead and re-evaluates the existing hazardous waste regulatory thresholds for lead in waste materials. This report will help determine whether DTSC will propose regulations to change the regulatory threshold for lead. Such a change would make the threshold consistent with current scientific knowledge and standards used for drinking water and site cleanup.
- 4. **Overloaded Dump Trucks**: These emergency regulations R-02-02 are scheduled to be sent to the Office of Administrative Law in April 2003. These regulations adopt environmentally protective standards for roadside off-loading of contaminated soil from a dangerously overloaded dump truck, and the transfer of the soil in bulk to another vehicle. DTSC will meet with the California Highway Patrol Commercial Vehicle Section to discuss the proposed full rule and coordinate issues between the two agencies. A public notice is scheduled for April 2003, and a public hearing is scheduled for May 2003. The final regulations are expected to be submitted to the Office of Administrative Law by the end of 2003.

Science, Pollution Prevention, and Technology

The science, pollution prevention, and technology program consolidates the scientific and technology-oriented activities of DTSC and supports environmental improvements through pollution prevention and the assessment of new environmental technologies. Many of the program's accomplishments and priorities appear in the Pollution Prevention section of "Areas of Emphasis" beginning on page 50.

Cal/EPA Goal 4: Communities free from unacceptable human health and ecological risks due to exposure from hazardous substances and other potential harmful agents.

Cal/EPA Goal 6: Ensure the efficient use of natural resources.

Cal/EPA Goal 7: Continuous improvement and application of science and technology.

DTSC Strategic Objectives:

Pursue phase-out of the use of selected persistent bioaccumulative toxic chemicals, based on highest environmental risk and the availability of suitable alternatives.

Reduce hazardous waste generation.

Diminish the dependence on treatment and disposal by reduction, reuse, and recycling.

Reduce the adverse impacts of hazardous waste transported across the California-Mexico border.

Enhance analytical capacity in risk assessment and measurements and monitoring to guide risk management decisions.

Promote the development, commercialization, and use of effective environmental techniques and technologies.

Develop data of adequate quality for hazardous substance measurement.

Reduce or eliminate disproportionate effects of pollution on low-income and minority populations.

Ensure that the broadest range of environmental information is understandable, available, accessible, and useful.

Understand, anticipate, and meet program needs for space, equipment, training, and information.

Environmental Science

DTSC assesses the risk and hazard to the public and the environment from exposure to hazardous substances. Staff scientists conduct chemical analysis, support regulatory programs, develop analytical methods, and conduct studies related to environmental fate and transport of chemicals.

Accomplishments

- 1. Updating Analytical Capabilities
 - DTSC installed a new chromatographic data system in its hazardous materials laboratory.
 - DTSC completed the new chromatographic data system and began converting from the outdated data management system to a new laboratory information management system. The new system will improve the capabilities of DTSC to store and retrieve lab reports as well as to generate sample-related reports.
- Laboratory Consolidation: DTSC continued coordinating with the Departments of General Services and Finance on plans to consolidate the Berkeley laboratories in the Berkeley regional office facility. Many laboratory staff and assets currently reside in a Department of Health Services building in downtown Berkeley that is slated for demolition in 2003.
- 3. **Reactive Hazardous Waste:** DTSC completed compiling guidance and test methods for reactive hazardous waste, including guidance and test methods for cyanide- and sulfide-containing waste that may generate toxic or lethal amounts of hydrogen cyanide or hydrogen sulfide.
- 4. **Persistent Organics in Animals**: DTSC completed the first phase of measuring polychlorinated biphenyls (PCB), polybrominated diphenyl ethers (PBDE), and dioxins in birds. These chemicals tend to accumulate in animals and humans, and the scientific evaluation of their potential health effects is ongoing. This task was sponsored by the U.S. Department of Fish and Wildlife.

- 5. **Dioxins in Agricultural Soils**: DTSC began analyzing dioxins in agricultural soils to assess the impact of fertilizers and soil amendment, a project funded by the Department of Food and Agriculture.
- 6. **National Standards Audit**: DTSC began ongoing audits of contract laboratory data for contract compliance and data quality.
- 7. **National Standards for Sampling and Field Measurement**: The DTSC hazardous materials laboratory led the development and adoption of uniform national standards for field activities in the National Environmental Laboratory Accreditation Conference in July.
- 8. **Data Quality Review**: DTSC conducted training on the review of laboratory reports, including problems related to laboratory uncertainty and potential data quality problems.
- 9. **Data Quality Objectives**: DTSC continued implementing the data quality objectives process in corrective actions and waste classification projects.
- 10. **Uniform National Standards for Audit**: Hazardous materials lab completed data audits for its contract labs using contract requirements and standards from the National Environmental Laboratory Accreditation Conference.

Priorities

- 1. **Updating Analytical Capabilities**: DTSC will configure, test, and begin using a new laboratory information management system to provide access to a database of laboratory data.
- 2. **Screening-Level Testing Guidance**: DTSC will revise guidance for laboratories on testing for substances at the screening levels on completion of scientific peer review of SB 32 (Escutia, Chapter 764, Statutes of 2001) risk-based screening levels.
- 3. **Guidance on the Use of Innovative Field Measurement**: DTSC will contribute to guidance developed by the Interstate Technology Regulatory Council on more efficient and more flexible field measurement activities.
- 4. **Persistent Organics in Animals**: Sponsored by the U.S. Department of Fish and Wildlife DTSC will complete the second phase of measurements of PCBs, PBDEs, and dioxins in birds.
- 5. **Dioxins in Agricultural Soils**: DTSC will complete analyzing dioxins in agricultural soils to assess the impact of fertilizers and soil amendments in this project funded by the Department of Food and Agriculture.
- 6. **National Standards**: DTSC will assist in the creation of uniform national standards in the new Institute for National Environmental Laboratory Accreditation.

7. **Data Quality Review**: DTSC will train staff on reviewing laboratory reports, including laboratory uncertainty and potential quality problems.

8. Persistent Bioaccumulative Toxic Substances

- Persistent Organics in Shorebirds. DTSC completed Phase I analysis for PCBs, PBDEs, and dioxins in eggs of shorebirds from the San Francisco Bay Estuary.
- Trends in Fish Contamination. DTSC also completed the analysis of dioxins and PCBs in fish
 from California coastal waters (funded by U.S. EPA and the State Water Resources Control
 Board).
- Dioxins in Agricultural Soils. DTSC completed the analysis of dioxins in agricultural soils to
 assess the impact of fertilizers and soil amendments (funded by the Department of Food and
 Agriculture).
- PBDEs in Human Breast Milk. DTSC was awarded a pollution prevention grant from U.S.
 EPA to measure PBDEs in breast milk from mothers in selected California communities.
- 9. **Verification of Field-Testing for Former Drug Labs**: In conjunction with the site mitigation program and OEHHA, immunoassay testing was completed for the verification of a commercially available immunoassay for methamphetamines.

Pollution Prevention

The pollution prevention and technology development office addresses hazardous waste source reduction and environmental technologies through statewide leadership, demonstration projects, and technology evaluations. The office assists technology developers, local government, and regulatory agencies. All accomplishments and priorities for this office appear under "Areas of Emphasis" beginning on page 50.

Technology Development

DTSC's technology development program evaluates new technologies to treat, recycle, clean up, reduce, or eliminate hazardous waste at its source. DTSC scientists and engineers evaluate new technologies so developers can bring their ideas to market. Through demonstration projects, data analysis, and life cycle assessments, the DTSC environmental technology program provides support to other DTSC programs. The performance evaluation reports provide objective information on innovative environmental technologies to the regulated community, potential buyers and users, other research interests, consultants, permitting entities, and other stakeholders. Because of California's fiscal crisis, some technology development resources within DTSC will be redirected to higher priority work.

Accomplishments

- Soil Vapor Extraction Off-Gas Treatment: DTSC worked with the UC Davis and other stakeholders to complete a study on technologies for treating vapors and gases from soil vapor extraction wells. With DTSC funding, UC Davis created a Web site accessible to the public that presents the results of that study. The Web site also has information and links to issues related to selecting and implementing common and alternative off-gas treatment technology at soil vapor extraction sites.
- Technology Verification/Certification: Due to limited resources, DTSC is not accepting any
 more applicants for certification but is completing its commitment to existing applicants. In the
 future, DTSC will focus technology evaluation and demonstration efforts to support regulatory
 programs as described under priorities.
 - Lithium meta-tungstate. DTSC completed and submitted to U.S. EPA for review the verification report on lithium meta-tungstate, a dense aqueous salt solution that can replace the use of hazardous halogenated solvents currently used for mineral separation tests.
 - Ion exchange regeneration system. In August 2002, DTSC certified the Hydromatix ion exchange column regeneration system and had the evaluation report and verification statement posted on U.S. EPA's Environmental Technology Verification Web site.
 - Onboard oil management system. DTSC completed field-testing for PuraDYN's onboard oil
 management system. This is a bypass engine oil filtration system that extends the intervals
 between oil changes, reducing the need for new oil and radically lowering the generation of
 waste oil.
 - Benthic flux sampling device. Staff will complete an evaluation of the U.S. Navy's benthic
 flux sampling device for determining the migration of polycyclic aromatic hydrocarbons into
 and out of marine sediments. This effort was "on hold" until the Navy recently secured the
 necessary funding to complete the project. The U.S. Navy is preparing a summary of the
 results from the latest round of testing.
 - Vegetable oil-based transformer oils. DTSC completed the evaluation reports and verification statements for two companies, ABB, Inc. and Cooper Power Systems, and posted them on U.S. EPA's Environmental Technology Verification Web site. DTSC certified the ABB, Inc., a vegetable oil-based transformer oil technology, in August. Cooper Power Systems requested that DTSC complete the certification process for their product.
- 3. **In-Situ Bioremediation Technology**: DTSC completed the in-house survey of five full-scale site cleanup projects using in-situ bioremediation. DTSC is developing a database containing information on the sites such as site description, hydrogeology contaminants, contaminant concentration, remediation technology type, and points-of-contact to facilitate appropriate and effective use of this technology.

Priorities

- 1. Technology Verification/Certification
 - Onboard Oil Management System. DTSC will produce the evaluation report for PuraDYN's onboard oil management system in spring 2003.
 - Benthic Flux Sampling Device. DTSC will review that data in conjunction with data from earlier studies, prepare a final report, and publish a certification decision.
- 2. Drum-Top Fluorescent Lamp Crushers: Staff is providing technical assistance to the DTSC hazardous waste management program to evaluate the performance of three different drum-top fluorescent lamp crushers currently on the market. U.S. EPA funds this project. DTSC will perform testing and analysis, and will use the data collected from this demonstration to develop a nationwide guidance document on the operation of these units.
- 3. CerOx Advanced Oxidation Technology: Staff will assist the DTSC hazardous waste management program to develop a conditional variance for operation and testing of the CerOx technology at UC Irvine to treat specific on-site waste streams. DTSC will work with UC Irvine and CerOx representatives to develop a test plan to assess emissions levels and effluents from treatment of these waste streams. This evaluation will ensure that the CerOx system can be operated safely and effectively.
- 4. **In-Situ Bioremediation Technology**: DTSC will prepare a technical report summarizing the survey results, including case studies of several selected sites.
- 5. Dense Non-Aqueous Phase Source Zone Treatment Technologies: DTSC will complete a survey of California facilities that use treatment technologies to remediate the source zone of sites contaminated with chlorinated solvents and other dense non-aqueous phase treatment technologies. DTSC will prepare a technical report summarizing the survey results.
- 6. Clearwater Systems: DTSC will develop a field test plan for a comprehensive evaluation of the Clearwater Systems' non-chemical technology for treating cooling tower water. DTSC will review existing data from historical practices at several cooling tower operations that utilized chemical reagents, evaluate the life-cycle benefits of the Clearwater Systems technology, and initiate long-term field tests at several cooling towers. The California Energy Commission will evaluate relative energy usage for this technology, which DTSC will use in its life-cycle assessment.

Registered Environmental Assessors (REA)

On January 1, 2003, the registered environmental assessor program will move to DTSC from the environmental health hazard assessment office. The program manages a registry of individuals who, based on their education, employment, and environmental assessment experience, carry out specified environmental assessment activities. The REA I is the basic level of registration for individuals

possessing two to five years of environmental assessment experience. Many have a degree in a biological or physical science, engineering, or law. The REA II is an advanced registration for professionals having at least eight years of environmental management experience. All possess degrees in a biological or physical science, or in engineering. Each REA II has at least four years of experience directing site investigation or cleanup projects during the past six years. REAs need to be registered so that large and small businesses can locate and hire a professional with a minimum standard of expertise to protect the consumer and business owner.

Cal/EPA Goal 4: Communities free from unacceptable human health and ecological risks due to exposure from hazardous substances and other potential harmful agents.

Cal/EPA Goal 5: Reduce or eliminate the disproportionate impacts of pollution on low-income and minority populations.

DTSC Strategic Objectives:

Establish and implement protective and consistent cleanup programs and standards that can serve as a model for California and the nation.

Ensure that we identify sites and prioritize our actions so that hazardous substances sites that are of the greatest impact to public health or the environment are characterized and remediated expeditiously.

Restore contaminated sites to beneficial use in a manner that protects public health and the environment.

Reduce, if not eliminate, disproportionate effects of pollution on low-income and minority populations.

Ensure DTSC's resources are focused on its highest priorities and core competencies.

Priorities

- 1. Completely Transfer the Program, Staff and Assets to DTSC: The registered environmental assessor program has various tangible and intangible assets that DTSC will absorb into its assistant director's office. DTSC will change REA regulations, brochures, forms, etc. to reflect this change.
- 2. **Establish Performance Standards for Registered Environmental Assessors**: The legislation moving the program to DTSC requires the department to establish minimum performance standards for the registrants by July 2003.
- 3. **Finalize Private Site Management Standard Regulations**: The DTSC site mitigation and brownfields reuse program will issue final regulations concerning the private site management program. Those regulations require that REA IIs conduct small, low-threat site cleanups that are

undertaken without full DTSC oversight. DTSC anticipates that the regulations will allow more of those small sites to be cleaned up quickly, returning the property to reuse.

External Affairs

Translating scientific and technological ideas, concepts, and language into everyday language is of vital importance so that the varied audiences of DTSC can readily understand the environmental world in which we live. The Office of External Affairs (OEA) communicates with community members, regulated businesses, community groups, media, other governmental agencies, and children. OEA is an outreach program for public participation, public information, education and outreach, environmental justice, and Web site coordination.

Cal/EPA Goal 4: Communities free from unacceptable human health and ecological risks due to exposure from hazardous substances and other potential harmful agents.

Cal/EPA Goal 5: Reduce, if not eliminate the disproportionate impacts of pollution on low-income and minority populations.

DTSC Strategic Objectives:

Strive for the broadest possible public involvement in site and facility decisions.

Ensure that the broadest range of environmental information is understandable, available, accessible, and useful.

Reduce, if not eliminate, disproportionate effects of pollution on low-income and minority populations.

Priorities

1. **Outreach Program**: DTSC will develop a comprehensive outreach strategy for communities, legislators, educators, and the media. This strategy will be designed to build confidence in the DTSC decision-making process and increase understanding of DTSC and its mission, processes, and goals.

Public Participation

The DTSC public participation program engages citizens affected by contaminated property with decision-makers and gives them a meaningful voice in the cleanup process. Public participation specialists give the public the opportunity to become informed and to actively participate in the process. This program is nationally recognized as the most proactive example of its type for citizen involvement. Its accomplishments and priorities appear in the Public Participation and Environmental Justice section of "Areas of Emphasis" beginning on page 54.

Public Information

The DTSC public information office develops and oversees special projects designed to articulate the mission of DTSC policies and programs, coordinates DTSC events with community members and elected officials, and assists with the DTSC mentor program. The public information office ensures that DTSC records are appropriately available to the public by overseeing responses to Public Records Act requests.

Accomplishments

- Media Days: DTSC planned and conducted site-specific "media days" at 15 sites to provide reporters with background information and opportunities for interviews on scientifically complicated subjects.
- 2. **Links on the DTSC Web Site**: DTSC established links to provide the public with more access to resources for developing accurate background via the DTSC Web site.
- 3. **Developmental Assistance for Mentor Program**: DTSC developed an independent DTSC mentorship program, supporting the Governor's initiative.

Priorities

1. **Trade and Professional Journals**: DTSC will enhance relationships with trade, professional, and Internet-produced publications to increase understanding of DTSC programs and policies.

Education and Outreach

The DTSC education and outreach office organizes education events and distributes environmental education materials to the public, especially school districts, teachers, parents, students, and the environmental industry. The education and outreach office manages the DTSC mentor program including recruitment, orientation, training, monitoring, and evaluation. It also manages the material placed on the DTSC Web site, develops internal and external documents and publications, and oversees environmental justice.

Accomplishments

- 1. **Earth Day Outreach**: DTSC produced coloring and activity books about environmental issues and Earth Day activities in English and Spanish for greater outreach to children.
- DTSC Mentor Program: DTSC created its own volunteer mentor program by recruiting and training interested staff in each of the regional offices so that employees could be matched with children at local schools.

Priorities

- 1. **Environmental Education Web Page**: The education and outreach program will develop a specialized Web page to provide information and activities for students and adults and work collaboratively with Cal/EPA on environmental education projects.
- 2. **DTSC Mentor Program Evaluation**: DTSC will assess the success of its volunteer mentor program throughout the state by surveying its participants and assessing behavioral changes in the protégés during the school year.
- 3. **Intensified Planning for Earth Day, April 2003**: Based on feedback from Earth Day 2002 participants, the education and outreach office upgraded its plans for the next Earth Day to include a new exhibit highlighting environmental education.

Environmental Justice

Environmental justice is equal application of environmental protection for all citizens and communities without regard to race, national origin, or income. Its accomplishments and priorities appear in the Public Participation and Environmental justice section under "Areas of Emphasis" beginning on page 54.

Informational Technology and the Internet

Informational technology is the application of science and communication for DTSC to communicate with its external and internal audiences on an ongoing basis. The DTSC Web site receives more than 150,000 hits per month from people needing to obtain information and remain connected to the work of DTSC.

Cal/EPA Goal 7: Continuous improvement and application of science and technology.

Cal/EPA Goal 8: An efficient Cal/EPA in pursuit of its mission.

DTSC Strategic Objectives:

To ensure the broadest range of environmental information is understandable, available, accessible, and useful.

To support staff with appropriate, well-communicated administrative services.

To understand, anticipate, and meet program needs for space, equipment, training, and information.

Accomplishments

 E-Government: DTSC launched its legislatively mandated hazardous waste tracking system in March 2002 as scheduled. DTSC converted and downloaded to the new system more than 14 million hazardous waste handler and manifest data records dating back to 1983. DTSC activated the Internet operations in July, providing the public with 10 sophisticated query-based reports on facility and manifest records dating from 1993. It allows local, State, and federal government staff to secure access to a more comprehensive array of reports through the Internet. DTSC staff trained about 350 local and federal governmental staff on these reports from July to November.

2. Regulatory Databases: DTSC developed two regulatory database enhancements to the hazardous waste tracking system. These include inspection, complaint, enforcement, and hazardous waste permit databases. DTSC successfully converted and loaded into the new inspections database all data-related inspection, complaint, and enforcement activities by June 2002. This allows DTSC to track and report more effectively on those activities. DTSC contractors completed the permitting portion of the project in early July; however, late-occurring data and design problems have delayed its implementation.

Priorities

1. **E-Government Web Site**: DTSC will continue to expand its Web site to provide the regulated community and other stakeholders with timely information and opportunities to conduct various transactions electronically. Staff will identify and post to the DTSC Web site frequently requested publications and forms to allow stakeholders constant access to these documents.

Terrorist Response and Disaster Preparedness

DTSC has existing emergency response duties, regulatory authority, and a staff of scientists with expertise to address the statewide response to the threat of terrorism.

Cal/EPA Goal 1: Air that is healthy to breathe, sustains and improves our ecosystems, and preserves natural and cultural resources.

Cal/EPA Goal 2: Rivers, lakes, estuaries and marine waters that are fishable, swimmable, support healthy ecosystems, and other beneficial uses.

Cal/EPA Goal 3: Groundwater that is safe for drinking and other beneficial uses.

Cal/EPA Goal 4: Communities free from unacceptable human health and ecological risks due to exposure from hazardous substances and other potential harmful agents.

DTSC Strategic Objectives:

Monitor California's hazardous waste storage, treatment, and landfill capacity to manage all its hazardous waste in a safe and efficient manner.

Understand, anticipate, and meet program needs for space, equipment, training, and information.

Accomplishments

1. **Manifest Discrepancies Regulations**: The DTSC hazardous waste management program produced the first set of regulations in the State to deal with anti-terrorism after September 11,

2001, when it produced emergency regulations governing the reporting of hazardous waste manifest discrepancies. Under the new provisions, hazardous waste facilities receiving wastes from off-site locations must report unresolved priority manifest discrepancies to DTSC within 24 hours. Additionally, the facilities must follow up by submitting a written notification within five days after discovery of the unresolved priority discrepancy. The regulations, which became effective April 4, 2002, implement more stringent requirements for the reporting of manifest discrepancies involving waste that hold potential for uses as weapons of terror. The new requirement applies to wastes that are explosive or poisonous as classified by the U.S. Department of Transportation hazard divisions 1.1 through 1.6, and hazard division 6.1. DTSC notified U.S. EPA that these regulations are in effect and has suggested that similar amendments be made to the corresponding federal regulations.

2. **Transporter Driver Information**: The DTSC hazardous waste management program required all registered hazardous waste transporters to submit the names of all drivers under their employment. DTSC used its Web site to register these hazardous waste transporter drivers, simplifying the effort for the transporters and facilitating data collection and processing. DTSC continues to receive updated driver information from transporters.

3. Chemical Terrorism

- Cross-Agency Information Sharing. DTSC science, pollution prevention, and technology
 program staff participated with laboratories of the Department of Health Services in a
 chemical terrorism exercise to test protocols for the analysis of chemical terrorism samples.
 Laboratory staff collaborated with other Cal/EPA agencies to request federal funds for mobile
 laboratory resources.
- Research on Chemical and Biological Threats. DTSC participated with the Office of Emergency Services, laboratory representatives from other State agencies, and with Lawrence Livermore National Laboratory to research the latest technology for monitoring chemical and biological agents.
- Emergency Response. DTSC began a validation report for a Hapsite gas chromatograph/mass spectrometer that has application in emergency response, including chemical terrorism response.
- 4. **Office Disaster Preparedness Plans**: DTSC adapted the standardized emergency management system for use in its office disaster preparedness plans in April and May 2002, when each of the regional offices received mandatory one-day training. Out of that training, office disaster management teams have formed and begun fully implementing the local plans.
- 5. **State Strategic Committee on Terrorism**: DTSC personnel continue to facilitate two terrorism-related work groups as part of the State strategic committee on terrorism. Under the sponsorship of the chemical subcommittee headed by the Office of the Secretary of Cal/EPA, the two work

groups deal with responding to hazardous material release and hazardous material transportation security. DTSC also participated in a request for federal homeland security funding.

Priorities

1. Chemical Terrorism

- Emergency Plan. DTSC will complete an emergency plan for the DTSC hazardous materials laboratory to prepare and respond to chemical terrorism.
- Validation Report. DTSC will complete a validation report for a field portable gas chromatograph/mass spectrometer. The system has possible application in investigating former clandestine drug labs and in response to chemical terrorism.
- 2. **Office Disaster Preparedness Plans**: DTSC will continue to fully implement its disaster response plans in the regional offices by conducting site-specific hazard assessments, procuring equipment and supplies, training staff, and exercising elements of the plan in an ever-increasing effort to be prepared for nearly any disaster.
- 3. **Terrorism Legislation**: As required by SB 489 (Romero, Chapter 607, Statutes of 2002), DTSC will develop a regulatory listing of hazardous wastes of concern, based on their potential to harm the public in a terrorist or other criminal act. By July 1, 2003, the law requires DTSC to adopt a list including the minimum quantities for hazardous wastes that are required to be reported when missing. This list must include hazardous waste that DTSC determines requires special handling restrictions and requirements.
- 4. **Background Checks**: DTSC will implement background checks and disclosure statements for transporters and facilities handling hazardous wastes of concern.